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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/925,745	08/10/2001	Haruhisa Kato	35. C15694	6653

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EXAMINER

QUINONES, ISMAEL C

ART UNIT PAPER NUMBER

2686

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/925,745

Applicant(s)

KATO, HARUHISA

Examiner

Ismael Quiñones

Art Unit

2686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-30 is/are pending in the application.
- 4a) Of the above claim(s) 29 and 30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Newly submitted **claims 29-30** are directed to inventions that are independent or distinct from the invention originally claimed for the following reasons:

Claims 29-30 are drawn to a plurality of amplifying means for transmission, second switching means for switching said plurality of amplifying means in accordance with the state of said wireless communication means, third switching means for disconnecting the power supplied to one of said plurality of amplifying means in accordance with the state of said wireless communication means, the invention is distinct from the originally presented invention which is incorporated into **claims 18-28** as a method for selecting/switching power supply means in accordance with a state of a wireless communications.

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 18-28, drawn to method/apparatus for selecting one of a plurality of power supply means in accordance with a state of a wireless communication apparatus, classified in class 455, subclass 572.
 - II. Claims 29-30, drawn to a plurality of amplifying means for transmission, classified in class 455, subclass 127.1.
3. The inventions are distinct, each from the other because:

Inventions II and III are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because **invention I** does not require the plurality of amplifying means for transmission in **invention II**. The subcombination has separate utility such as varying the voltage gain when switching to one of the plurality of amplifying means in accordance with a state of a wireless communication apparatus.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 29-30 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

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international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. **Claims 18-28** are rejected under 35 U.S.C. 102(e) as being anticipated by Park (U.S Pat. No. 6,374,127).

Regarding **claim 18**, Park discloses a wireless communication apparatus (*col. 1, lines 15-20; col. 3, lines 7-9; Figs. 1, 2 and 5*) comprising: wireless communication means (communication means such as a receiver, a transmitter, a baseband signal processor; *Fig. 2; Fig. 5*); a plurality of power supply means for supplying a power to said wireless communication means (A battery, voltage controllers, voltage regulators, DC/DC converters, *col. 1, lines 26-46; col. 3, lines 7-21; Figs. 1 and 2*); and selecting means for selecting one of said plurality of power supply means in accordance with a state of said wireless communication means (Wherein the mobile communication terminal comprises selecting means such as transistors and responses from signals (TX_AGC, TX_MODE) whose voltage state vary according to a transmission or reception mode, subsequently selecting the appropriate voltage according to said transmission and reception modes; *col. 2, lines 32-43; col. 3, lines 49-42; col. 4, line 34 thru col. 5, line 15*), wherein power from the selected one of said plurality of power supply means is supplied to said wireless communication means (wherein an corresponding output voltage is supplied to the mobile communication terminal in both reception and transmission modes, thereby supplying voltage to the transmitter and the receiver; *col. 2, lines 24-42; col. 4, lines 22-27*).

Regarding **claim 19**, and as applied to claim 18, Park discloses the aforementioned apparatus, wherein said plurality of power supply means supplies the

power originated from a common power source (Wherein power supply elements such as DC/DC converters and voltage regulators are coupled to a common power source such as battery; *Figs. 1 and 2, item 10*).

Regarding **claim 20**, and as applied to claim 20, Park discloses the aforementioned, wherein said plurality of power supply means comprises a series regulator (The power supply comprising voltage regulators coupled in series with transmitter and the receiver; Fig. 2, items 72, 74 and 76) and a DC/DC converter (*Fig. 1, items 18 and 22; Fig. 2, item 20*).

Regarding **claim 21**, Park discloses a method of supplying a power for wireless communications (A plurality of power supplies such as battery, voltage controllers, voltage regulators, DC/DC converters, and switching means for switching said plurality of power supplies, such as transistors (Q, SW) and signal responses (TX_AGC, TX_MODE), *col. 1, lines 26-46; col. 3, lines 7-21; Figs. 1-3*), comprising the steps of: detecting a state of the wireless communication (Detecting a transmission and a reception mode according to an active or inactive response from a signal TX_MODE; *col. 4, lines 34-58*); and selecting one of a plurality of power supplies in accordance with a state of the wireless communication (Wherein the mobile communication terminal comprises selecting means such as transistors and responses from signals (TX_AGC, TX_MODE) whose voltage state vary according to a transmission or reception mode, subsequently selecting the appropriate voltage according to said transmission and reception modes; *col. 2, lines 32-43; col. 3, lines 49-42; col. 4, line 34 thru col. 5, line 15*), supplying power for the wireless communication from the selected one of the plurality of power supplies

(wherein an corresponding output voltage is supplied to the mobile communication terminal in both reception and transmission modes, thereby supplying voltage to the transmitter and the receiver; *col. 2, lines 24-42; col. 4, lines 22-27*).

Regarding **claim 22**, and as applied to claim 21, Park discloses the aforementioned method, wherein the plurality of power supplies for supplying the power originated from a common power source for the wireless communications (Wherein power supply elements such as DC/DC converters and voltage regulators are coupled to a common power source such as battery; *Figs. 1 and 2, item 10*).

Regarding **claim 23**, Park discloses a wireless communication apparatus comprising: wireless communication means for transmitting and receiving signals wirelessly (communication means such as a receiver, a transmitter, a baseband signal processor; *Fig. 2; Fig. 5*); a plurality of power supply means for supplying a power to said wireless communication means (A battery, voltage controllers, voltage regulators, DC/DC converters, *col. 1, lines 26-46; col. 3, lines 7-21; Figs. 1 and 2*); and switching means for switching at least one of said plurality of power supply means in accordance with a signal received by said wireless communication means (Wherein the mobile communication terminal comprises selecting means such as transistors and responses from signals (TX_AGC, TX_MODE) whose voltage state vary according to a transmission or reception mode, subsequently selecting the appropriate voltage according to said transmission and reception modes; *col. 2, lines 32-43; col. 3, lines 49-42; col. 4, line 34 thru col. 5, line 15*).

Regarding **claim 24**, and as applied to claim 23, Park disclose the aforementioned apparatus, wherein said switching means switches said at least one of said plurality of power supply means in accordance with reception of the signal for permitting transmission from said wireless communication means (Applying the appropriate voltage for transmission mode in accordance with a signal TX_MODE; *col. 4, lines 44-58*).

Regarding **claim 25**, and as applied to claim 23, Park disclose the aforementioned apparatus, wherein said switching means switches said at least one of said plurality of power supply means in accordance with the signal received by said wireless communication means and existence of transmission data to be transmitted by said wireless communication means (Wherein a TX_AGC voltage is used to detect a change in transmission power, which increases in proportion with the transmission power in transmission mode, thereby associating an increase in transmission power with the data transmission; *col. 5, lines 1-15; col. 6, lines 1-15*).

Regarding **claim 26**, Park disclose a method of supplying power to a wireless communication device which receives and transmits signals (communication means such as a receiver, a transmitter, a baseband signal processor; *Fig. 2; Fig. 5*), comprising the steps of: providing power from a plurality of different power supplies (A plurality of power supplies such as battery, voltage controllers, voltage regulators, DC/DC converters, and switching means for switching said plurality of power supplies, such as transistors (Q, SW) and signal responses (TX_AGC, TX_MODE), *col. 1, lines 26-46; col. 3, lines 7-21; Figs. 1-3*); receiving a signal from the wireless communication device (Applying the appropriate voltage for transmission mode in accordance with a signal

TX_MODE; *col. 4, lines 44-58*); and switching power from at least one of the plurality of power supplies in accordance with the signal received in said receiving step (Wherein the mobile communication terminal comprises selecting means such as transistors and responses from signals (TX_AGC, TX_MODE) whose voltage state vary according to a transmission or reception mode, subsequently selecting the appropriate voltage according to said transmission and reception modes; *col. 2, lines 32-43; col. 3, lines 49-42; col. 4, line 34 thru col. 5, line 15*).

Regarding **claim 27**, and as applied to claim 26, Park disclose the aforementioned method, wherein said switching step switches said at least one of the plurality of power supplies in accordance with reception of the signal for permitting transmission (Applying the appropriate voltage for transmission mode in accordance with a signal TX_MODE; *col. 4, lines 44-58*).

Regarding **claim 28**, and as applied to claim 26, Park disclose the aforementioned method, wherein said switching step switches said at least one of the plurality of power supplies in accordance with the signal received in said receiving step and existence of transmission data to be transmitted (Wherein a TX_AGC voltage is used to detect a change in transmission power, which increases in proportion with the transmission power in transmission mode, thereby associating an increase in transmission power with the data transmission; *col. 5, lines 1-15; col. 6, lines 1-15*).

Response to Arguments

6. Applicant's arguments filed on September 24, 2004 have been fully considered but they are not persuasive.

In response to Applicant's arguments against claims rejections under 35 U.S.C. § 102(e) that Park does not disclose or suggest selecting one of a plurality of power supplies (or power supply means) in accordance with a state of the wireless communications, and supplying power for the wireless communication from the selected one of the plurality of power supplies (or power supply means), the Examiner respectfully disagrees.

Park does suggest or disclose the above-mentioned limitation by disclosing a transmission mode signal (TX_MODE) which in accordance with its state (activated or inactivated transmission mode) is turned on or off and therefore selects a different voltage supplied to the wireless communication means such as the receiver and the transmitter, for instance when the transmission mode signal is inactive a voltage of 3.3 V is selected for the receiver wherein none is applied to the transmitter, on the contrary if the transmission mode signal is active a different voltage of 3.6 V is selected and thereby supplied to the transmitter (*See col. 4, lines 34-58*).

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office Action. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

8. Any response to this Office Action should be **faxed to (703) 872-9306** or **mailed to:**

Commissioner of Patents and Trademarks

P.O. Box 1450

Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Crystal Park II

2021 Crystal Drive

Arlington, VA 22202

Sixth Floor (Receptionist)

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9. Any inquiry concerning this communication on earlier communications from the Examiner should be directed to Ismael Quiñones whose telephone number is (703) 305-8997. The Examiner can normally be reached on Monday-Friday from 8:00am to 5:00pm.


10. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Marsha D. Banks-Harold can be reached on (703) 305-4379. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9301.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose number is (703) 305-4700 or call customer service at (703) 306-0377.

Ismael Quiñones

I.Q

January 24, 2005


RAFAEL PEREZ-GUTIERREZ
PATENT EXAMINER
1/24/05